ORDER NO. GAD8708178A2

Service Manual

FM-LW-MW-SW ALL BAND RECEIVER

Radio

RF-B40DL

(Black)

This is the Service Manual for the following areas.

[ZI]...For Italy and Finland.

[ZG]...For F.R. Germany

- Please use this manual together with the service manual for model No. RF-B40DL [X] order No. GAD8705090C3.
- This service manual indicates the main differences between; Original RF-B40DL [X] and RF-B40DL [ZI] [ZG].

CHANGES

■ SPECIFICATIONS

Frequency Range:
SW; 1.615~29.995 MHz

Intermediate Frequency:
AM (MW, LW, SW); 450 kHz

Power Requirement:
AC; [X] .... 110~127/220~240 V, 50/60 Hz with included AC adaptor

RF-B40DL [X] (Original)

Frequency Range:
[ZG]...SW; 1.615~26.1 MHz
[ZI]...SW; 3.8~26.1 MHz

Intermediate Frequency:
AM (MW, LW, SW); 459 kHz

Power Requirement:
AC; [ZI] [ZG] .... 220 V, 50 Hz with included AC adaptor

RF-B40DL [ZI] [ZG]

■ ALIGNMENT POINTS

AM (1) 2nd	AM (2) 2nd
450±0.5 kHz	450±0.5 kHz
T9	T8

RF-B40DL [X] (Original)

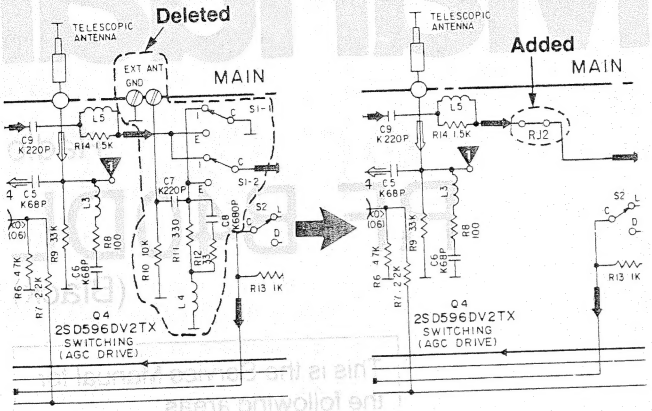
AM (1) 2nd	**AM (2) 2nd**
459±0.5 kHz	**459±0.5 kHz**
T9	T8

RF-B40DL [ZI] [ZG]

Panasonic

Matsushita Electric Trading Co., Ltd.
P.O. Box 288, Central Osaka, Japan

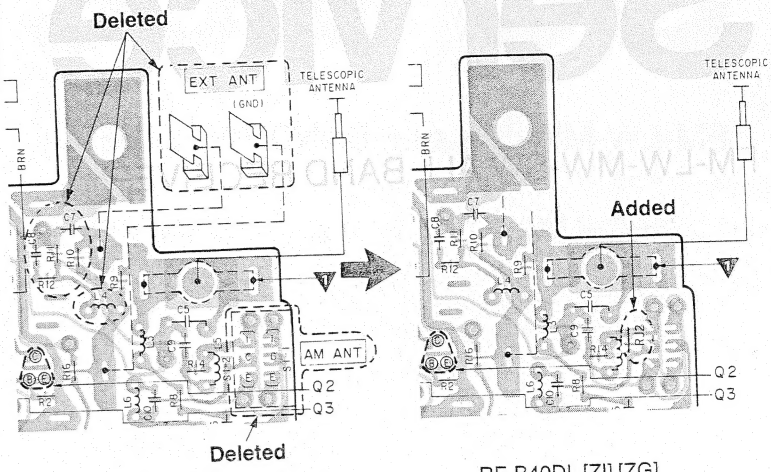
■ SCHEMATIC DIAGRAM
(MAIN CIRCUIT)



RF-B40DL [X] (Original)

RF-B40DL [ZI] [ZG]

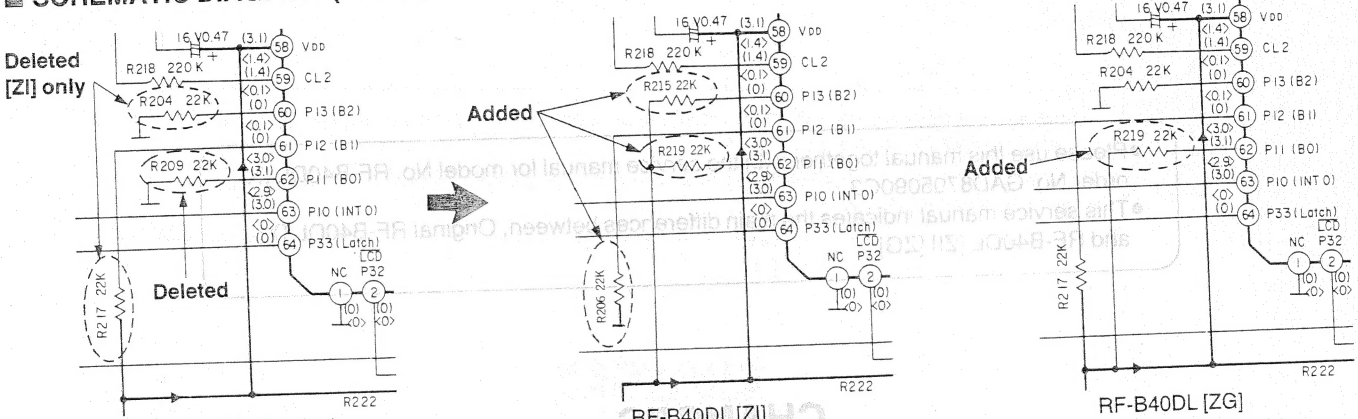
■ CIRCUIT BOARD AND WIRING CONNECTION DIAGRAM (MAIN CIRCUIT)



RF-B40DL [X] (Original)

RF-B40DL [ZI] [ZG]

■ SCHEMATIC DIAGRAM (LCD CIRCUIT)

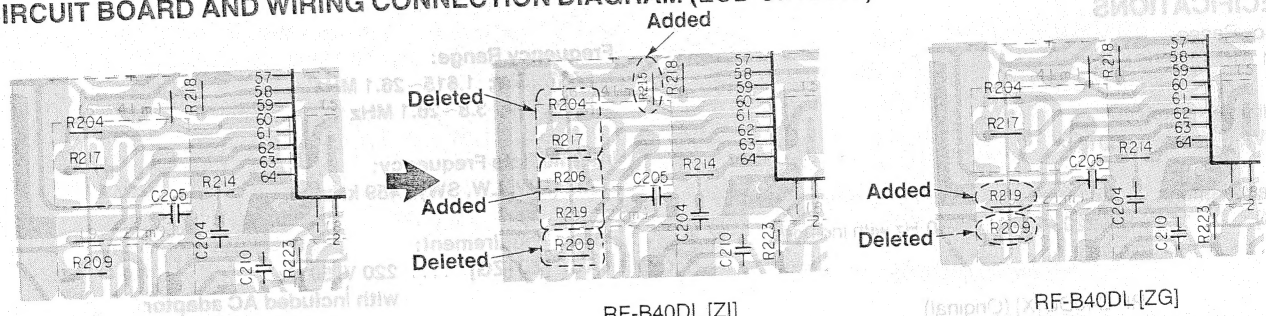


RF-G40DL [X] (Original)

RF-B40DL [ZI]

RF-B40DL [ZG]

■ CIRCUIT BOARD AND WIRING CONNECTION DIAGRAM (LCD CIRCUIT)

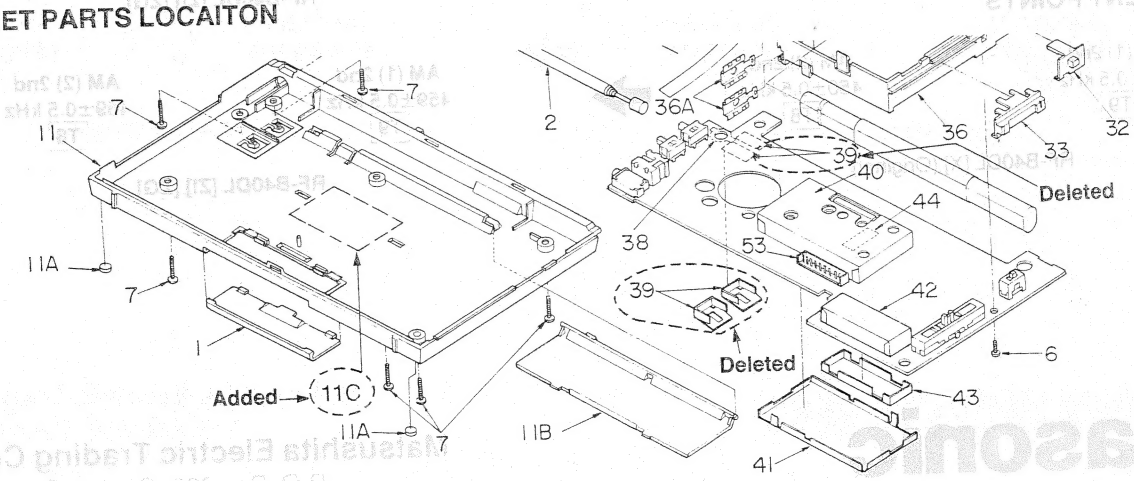


RF-B40DL [X] (Original)

RF-B40DL [ZI]

RF-B40DL [ZG]

■ CABINET PARTS LOCAITON



MEASUREMENTS AND ADJUSTMENTS

■ FM VCO, SW VCO, AM LOCAL OSC ALIGNMENT

	BAND	FREQUENCY DISPLAY SETTING	DC DIGITAL VOLTMETER	FREQUENCY COUNTER	ADJUSTMENT	REMARKS
	SW VCO ALIGNMENT					
(2)	SW	29.995 MHz	⑩...(+) ⑪...(−)	—	L15	Adjust L15 for 9.0 ±0.1 V reading on DC digital voltmeter.

■ AM IF ALIGNMENT

AM-IF (2nd) ALIGNMENT

(12)	AM	Fashion loof of several turns of wire and radiate signal into loop of receiver.	450 kHz 30% Mod. with 400 Hz.	Point of noninterference. (on/about 600 kHz).	Output meter across Voice coil.	T9 (1st) T8 (2nd)	Adjust for maximum output.

RF-B40DL [X] (Original)

■ FM VCO, SW VCO, AM LOCAL OSC ALIGNMENT

	BAND	FREQUENCY DISPLAY SETTING	DC DIGITAL VOLTMETER	FREQUENCY COUNTER	ADJUSTMENT	REMARKS
	SW VCO ALIGNMENT					
(2)	SW	**26.1 MHz**	⑩...(+) ⑪...(−)	—	L15	Adjust L15 for 9.0 ±0.1 V reading on DC digital voltmeter.

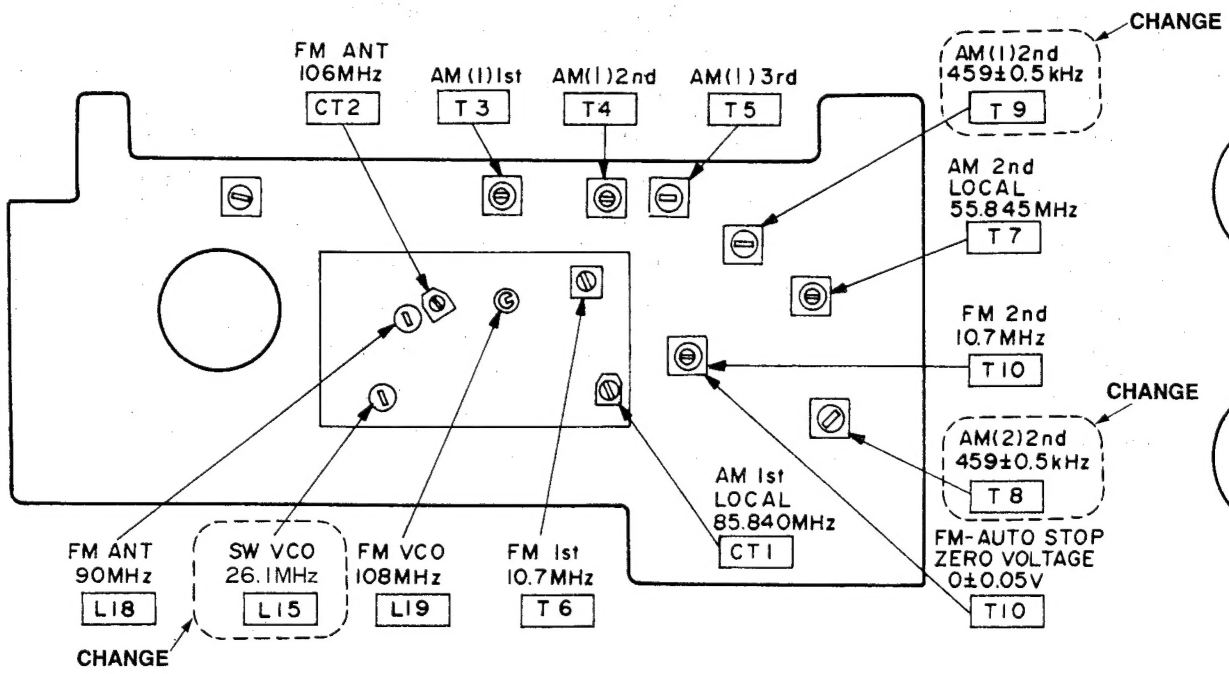
AM-IF (2nd) ALIGNMENT

(12)	AM	Fashion loof of several turns of wire and radiate signal into loop of receiver.	459 kHz 30% Mod. with 400 Hz.	Point of noninterference. (on/about 600 kHz).	Output meter across Voice coil.	T9 (1st) T8 (2nd)	Adjust for maximum output.

RF-B40DL [ZI] [ZG]

■ ALIGNMENT POINT

• Please refer to Circuit Board and Wiring Connection Diagram for test point locations.



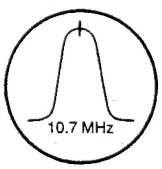


Fig. 1

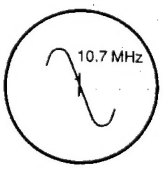


Fig. 2

■ PARTS COMPARISON TABLE

Notes:

1. Important safety notice
   Components identified by ⚠ mark have special characteristics important for safety.
   When replacing any of these components, use only manufacturer's specified parts.
2. The letter in square brackets in the Remarks column indicates the shipping destination.
   [ZI]...For Italy and Finland
   [ZG]...For F.R. Germany

Ref. No.	Description	Part Number		Remarks
		RF-B40DL [X] (Original)	**RF-B40DL [ZI] [ZG]**	
C7	Capacitor	RCUV1H221K	——	**Deleted**
C8	Capacitor	RCUV1H681KB	——	**Deleted**
R11	Resistor	RRJ6GCJ331TE	——	**Deleted**
R12	Resistor	RRJ6GCJ330	——	**Deleted**
R204 [ZI]	Resistor	RRJ6GCJ223TE	——	**Deleted**
R206 [ZI]	Resistor, 1/10 W, 22 kΩ	——	**RRJ6GCJ223TE**	**Added**
R209	Resistor	RRJ6GCJ223TE	——	**Deleted**
R215 [ZI]	Resistor, 1/10 W, 22 kΩ	——	**RRJ6GCJ223TE**	**Added**
R217 [ZI]	Resistor	RRJ6GCJ223TE	——	**Deleted**
R219	Resistor, 1/10 W, 22 kΩ	——	**RRJ6GCJ223TE**	**Added**
RJ2	Jumper	——	**RRJ6GCJ000TE**	**Added**
L4	Coil	RLQZN220K-D	——	**Deleted**
CF2	Ceramic Filter	RVF450UI1-M	**RVF459UI1-M**	
S1	Switch, Antenna	RSS2B43Y	——	**Deleted**
X2	Crystal	RVCA55395NRW	**RVCF55386NRW**	
11 [ZI]	Rear Cabinet Ass'y	RYFFB40LX	**RYFFB40DLZI**	
11 [ZG]	Rear Cabinet Ass'y	RYFFB40LX	**RYFFB40DLZG**	
11C [ZI]	Name Plate	——	**RGT1318WA-0**	**Added**
11C [ZG]	Name Plate	——	**RGT1318XA-0**	**Added**
12 [ZI]	Front Cabinet Ass'y	RYMFB40LX	**RYMFB40DLZI**	
12 [ZG]	Front Cabinet Ass'y	RYMFB40LX	**RYMFB40DLZG**	
36	Chassis Ass'y	RZAFB40LX	**RZAFB40DLZG**	
39	Terminal	RJT1093ZA	——	**Deleted**
A1	Antenna Cord	RSA805ZA	——	**Deleted**
A2	Plug	RJP120ZS	——	**Deleted**
A4	AC Adaptor ⚠	RD9496XR	**RD9496SXGR**	
A5	Instruction Manual	RQX5011ZA	**RQX5048ZA**	
A6	Carrying Case	RQD248ZA-0	**RQD248YA-0**	
P3	Carton Box	RPK2549ZB	**RPK2584ZA**	
P6	Cushion	——	**RPE688ZA**	**Added**

Printed in Japan
870801300 Ⓕ H.Y/T.M

ORDER NO. GAD8705090C3

Service Manual

FM-LW-MW-SW ALL BAND RECEIVER

Radio

RF-B40DL

(Black)

This is the Service Manual for the following area.

[X]....For Asia,Latin America,Middle East and Africa areas.

[XL]....For Australia.

SPECIFICATIONS

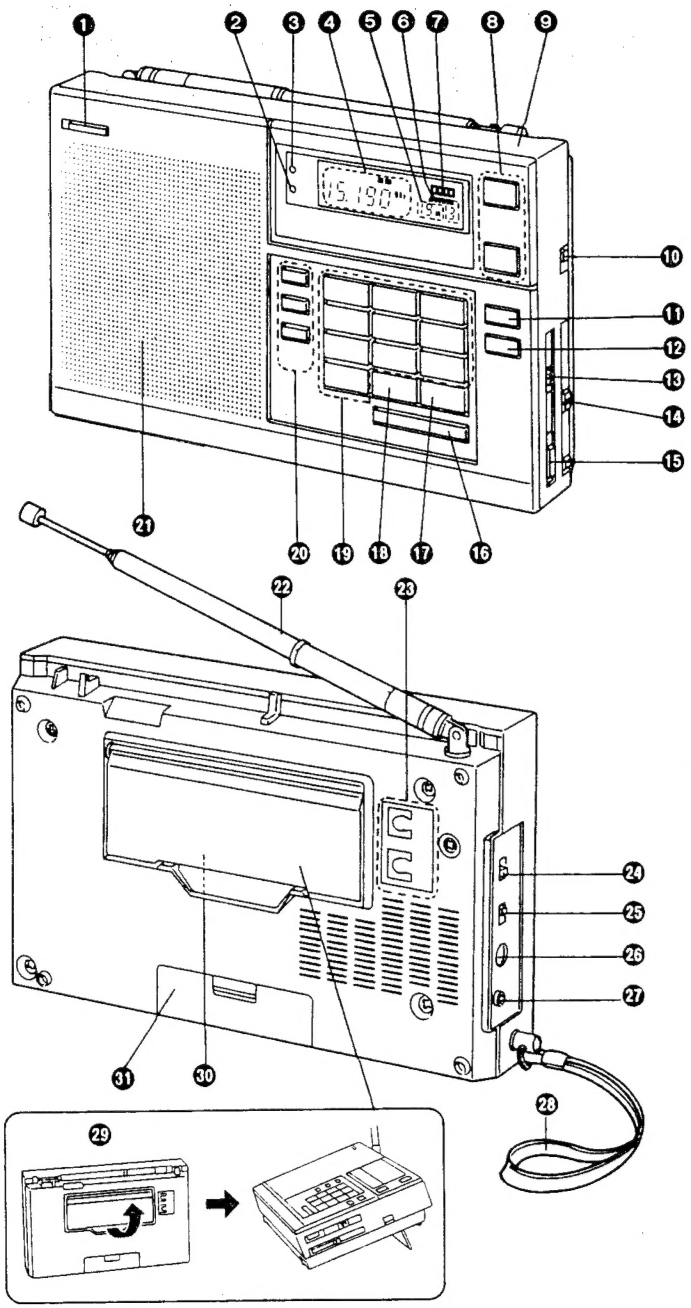
Frequency Range:	FM; 87.5~108MHz LW; 146~288KHz MW; 522~1611KHz(at 9KHz step) 520~1610KHz(at 10KHz step) SW; 1.615~29.995MHz
Intermediate Frequency:	FM; 10.7MHz AM(MW,LW,SW); 450KHz
Sensitivity:	FM; 2.5μV/50mW output(-3dB Limit Sens) LW; 563μV/m/50mW output (at 281KHz, S/N 20dB) MW; 45μV/m/50mW output SW; 11μV/50mW output (at 6MHz,S/N 20dB)
Power Requirement:	Battery; 6V (four UM-3,"AA"size batteries) AC;(X)....110~127/220~240V,50/60Hz with included AC adaptor (XL)...240V,50Hz with included AC adaptor
Power Consumption:	5W(AC Only)
Power Output:	550mW (RMS Max.)
Speaker:	8cm PM Dynamic Speaker (8Ω)
Output:	Earphone;ø3.5 (8Ω)
Dimensions:	187(W)x110(H)x37(D)mm
Weight:	480g Without Batteries

Design and speccfications are subject to change without notice.

National

Matsushita Electric Trading Co., Ltd.
P.O. Box 288, Central Osaka Japan

LOCATION OF CONTROLS



❶ Power Switch (POWER)

❷ Tuning Indicator (TUNING)
- When tuned in correctly, this indicator will light.

❸ Power/Battery Check Indicator (POWER/BATT)

LCD Multi Display

❹ Band/Frequency Display

❺ Meter Band Display
appears when the tuning is done within the meter band. (except for 11 meter band)

❻ Memory and Memory Channel Indicator
appears when the memory tuning is done.

❼ Lock Indicator
appears when the receiving is locked by sliding the Lock Switch.

❽ Up and Down Keys (∧ • ∨)
Press the Up Key (∧) or Down Key (∨) to make the frequency change up or down during Manual Tuning and Auto Scan Tuning.

❾ Short Wave Frequency Allocation

❿ Tone Selector (TONE)

⓫ Frequency Direct Access Key (FREQ)
Press the key before entering the frequency number.

⓬ Meter Band Direct Access Key (METER)
Press the key before calling the lowest frequency of the SW meter band including your desired station.

⓭ MW Frequency Step Selector (MW STEP)

⓮ Volume Control (VOLUME)

⓯ Lock Switch (LOCK)
When you slide this switch up, all the keys in the front panel except the Power Switch will be locked and will not operate.

⓰ Enter Key (ENTER)
After entering the frequency number of your desired station, press the key to begin receiving the broadcast of the station.

⓱ Memory/13 Meter Band Key
Use the key first when you preset the desired stations into each of the memory channels. This key also functions as the 13 Meter Band Key, which can call the lowest frequency of a SW meter band.

⓲ Decimal Point/16 Meter Band Key
For Frequency Direct Access Tuning, use the key to enter the decimal point of the frequency.
This key also functions as the Meter Band Key.

⓳ Number/Memory Channel/Meter Band Keys
Press the keys in the following ways.
- In Frequency Direct Access Tuning, to enter the frequency number of your desired stations.
- In Memory Tuning, to preset and call the stations.
- In Meter Band Direct Access Tuning, to call the lowest frequency of a SW meter band.

⓴ Band Select Keys

㉑ Speaker (8 cm, 8Ω)

㉒ Telescopic Antenna

㉓ External Antenna/Earth Terminals
In most areas the model's ferrite antenna and telescopic antenna will provide sufficient reception. However, it is a good idea to connect an external antenna to these terminals when receiving weak-signal broadcasts or when using the radio in a fringe area.

㉔ AM Antenna Selector (AM ANT)
Select "INT" or "EXT" when using the antenna. The selector doesn't work for FM reception.

㉕ AM Sensitivity Selector (AM SENS)
Normally set to "DX". When the reception is impaired or interfered by powerful station, set to "LOCAL".
The selector cannot operate for FM reception.

㉖ DC Input Jack (DC IN 6 V ⊖-◉-⊕)

㉗ Earphone Jack (∩) (∅3.5, 8Ω)
Connect the included earphone to the jack.
- Adjust the volume to lower level so as not to injure your ear.

㉘ Carrying Strap

㉙ Stand
By using the stand, it is easy to operate.

㉚ Station Reminder (STATION REMINDER)
Open the Stand and attach the included Memory Channel Sheets to the Station Reminder. It is useful for Memory Tuning.

㉛ Battery Compartment

DISASSEMBLY INSTRUCTIONS

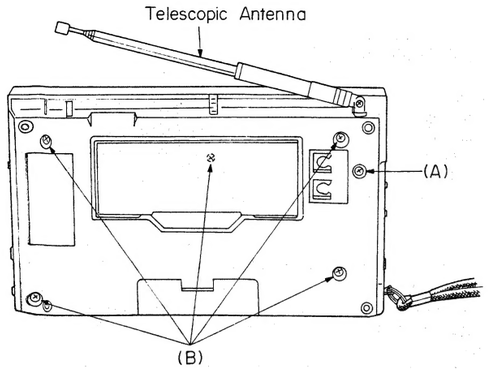


Fig. 1

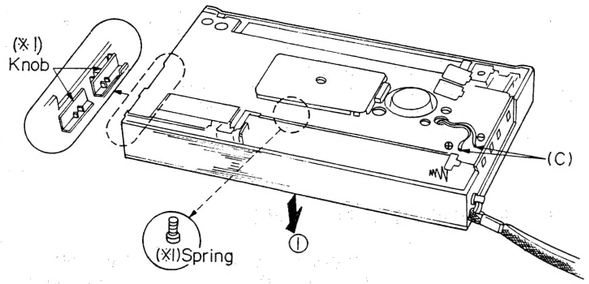


Fig. 2

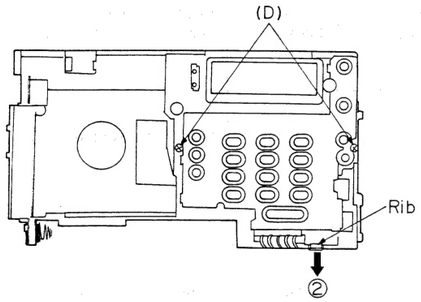


Fig. 3

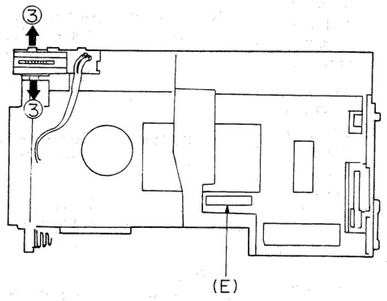


Fig. 4

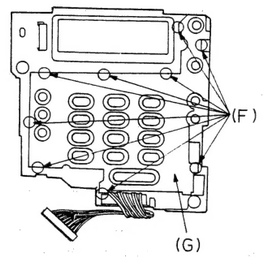


Fig. 5

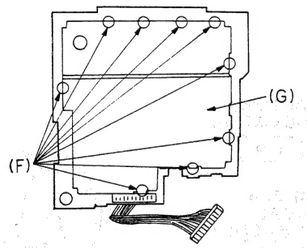


Fig. 6

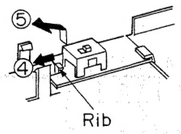


Fig. 7

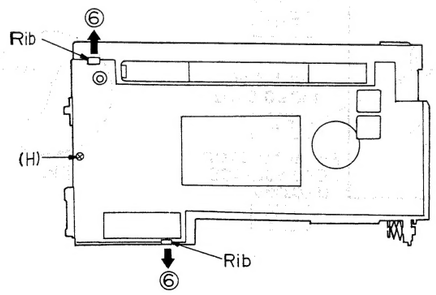


Fig. 8

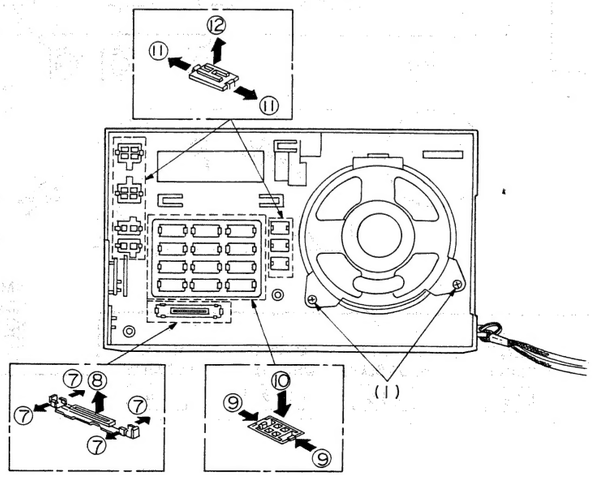


Fig. 9

Steps	Shown in Fig. —.	To remove—.	Remove—.
1	1	Telescopic Antenna	Screw (2.6×14) mm ..... (A)×1
2	1	Rear Cabinet	Screw (2.6×14) mm ..... (B)×5
3	2	Front Cabinet (※1)	Remove the solder (C) from speaker terminal.
4			Remove the front cabinet in the direction of arrow ①.
5	3	LCD Circuit Board	Screw (2×5) mm ..... (D)×2
6			Push the rib in direction of arrow ② and remove the LCD circuit board.
7	4		Socket (CP1) ..... (E)×1
8	5, 6		Desolder the 18 points. ..... (F)×18
9			Shield Plate ..... (G)×2
10	4	Power Switch Knob	Push the rib in direction of arrows ③ and remove the power switch knob.
11	7	Power Switch Circuit Board	Push the rib in the direction of arrow ④ and remove the power switch circuit board in the direction of arrow ⑤.
12	8	Main Circuit Board	Screw (2×5) mm ..... (H)×1
13			Push the rib in the direction of arrows ⑥ and remove the main circuit board.
14	9	Speaker	Screw (2.6×8) mm ..... (I)×2
15	9	ENTER Key	Push the rib in the direction of arrows ⑦ and remove the button in the direction of arrow ⑧.
16	9	MEMORY, DECIAL POINT and NUMBER Key	Push the rib in the direction of arrows ⑨ and remove the buttons in the direction of arrow ⑩.
17	9	BAND, DIRECT ACCESS and MANUAL TUNING Key	Push the rib in the direction of arrows ⑪ and remove the buttons in the direction of arrow ⑫.

(※1) Remove the front cabinet as shown in Fig. 2. At this time, be careful not to loose the spring and knobs.

■ HOW TO REPLACE (MAIN CIRCUIT BOARD)

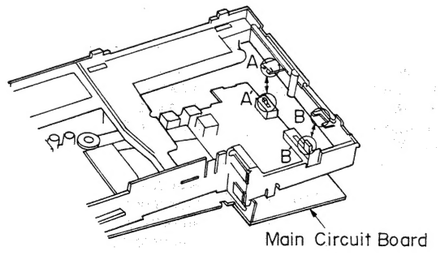


Fig. 10

1. During installation, simultaneously fit in A and A', B and B'.

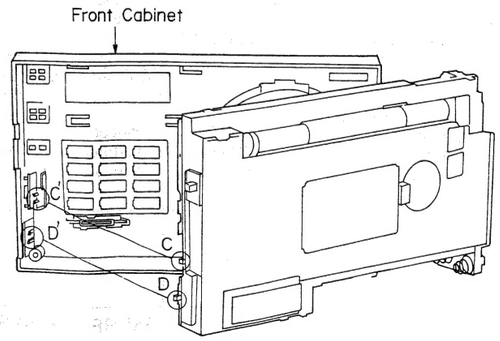


Fig. 11

2. During installation, simultaneously fit in C and C', D and D'.

D

MEASUREMENTS AND ADJUSTMENTS

■ ALIGNMENT INSTRUCTIONS

READ CAREFULLY BEFORE ATTEMPTING ALIGNMENT	
Note: 1. Set power on switch to ON. 2. Set volume control to MAXIMUM. 3. Set tone select switch to HIGH. 4. Set lock switch to OFF.	5. Set sens switch to DX. 6. Set MW frequency step select switch to 9 kHz. 7. Set band switch to LW, MW, SW or FM. 8. Set power source voltage to 6 V DC.
EQUIPMENT REQUIRED	
1. Frequency counter. 2. Oscilloscope (Dual dimension). 3. RF voltmeter.	4. DC digital voltmeter. 5. Ampere meter. 6. Signal generator.

■ FM VCO, SW VCO, AM LOCAL OSC ALIGNMENT

	BAND	FREQUENCY DISPLAY SETTING	DC DIGITAL VOLTMETER	FREQUENCY COUNTER	ADJUSTMENT	REMARKS
			FM VCO ALIGNMENT			
(1)	FM	108.00 MHz	⑩...(+) ⑪..(−)	——	L19	Adjust L19 for 9.0 ±0.1 V reading on DC digital voltmeter.
			SW VCO ALIGNMENT			
(2)	SW	29.995 MHz	⑩...(+) ⑪...(−)	——	L15	Adjust L15 for 9.0 ±0.1 V reading on DC digital voltmeter.
			AM 1st LOCAL OSC ALIGNMENT			
(3)	AM	29.995 MHz	——	⑤...(+) ⑪...(−)	CT1	Adjust CT1 for 85.840 MHz ±50 Hz reading on frequency counter.
			AM 2nd LOCAL OSC ALIGNMENT			
(4)	AM	29.995 MHz	——	⑤...(+) ⑪...(−)	T7	Adjust T7 for 55.845 MHz ±50 Hz reading on frequency counter.

■ FM IF, RF, AUTO STOP ZERO VOLTAGE ALIGNMENT

	BAND	SIGNAL GENERATOR or SWEEP GENERATOR		FREQUENCY DISPLAY SETTING	INDICATOR (ELECTRONICS VOLTMETER or SCOPE)	ADJUSTMENT	REMARKS
		CONNECTIONS	FREQUENCY				
				FM-IF ALIGNMENT			
(5)	FM	Connect to test point ⑨ through 0.001μF. Negative side to test point ⑪.	10.7 MHz (400 Hz SWP.)	Point of non-interference. (on/ about 90 MHz)	Connect vert. amp. of scope to test point ⑧. Negative side to test point ⑪.	T6 (FM 1st IFT)	Adjust of maximum amplitude. (Refer to fig. 1.)
(6)	FM	〃	〃	〃	〃	T10 (FM 2nd IFT)	Adjust for maximum amplitude. (Refer to fig. 2.)
				FM-RF ALIGNMENT			
(7)	FM	Connect to test point ⑦ through FM dummy antenna. Negative side to test point ⑪.	90.00 MHz	90.00 MHz (CH2)	Connect vert. amp. of scope to test point ⑧. Negative side to test point ⑪.	L18 (FM ANT Coil)	Adjust for maximum output.
(8)	FM	〃	106.00 MHz	106.00 MHz (CH4)	〃	CT2(FM ANT Trimmer)	Adjust for maximum output. Repeat steps (8). (7),

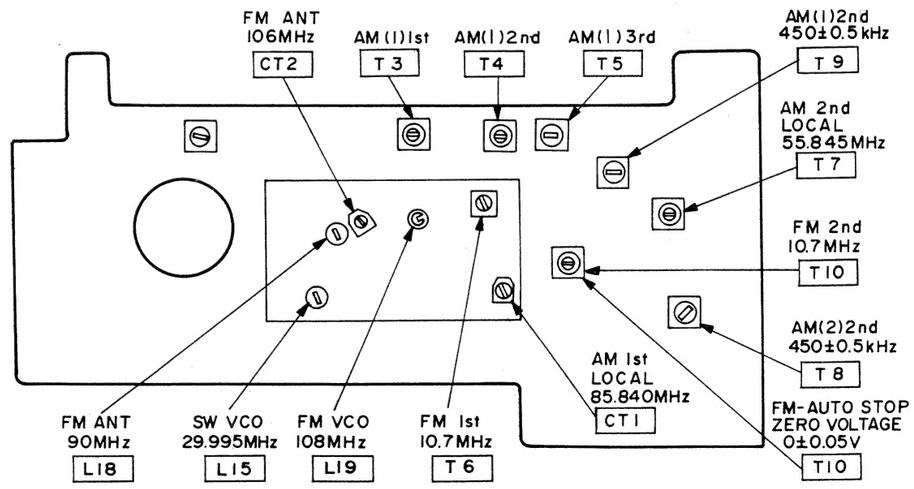
				FM-AUTO STOP ZERO VOLTAGE ALIGNMENT			
(9)	FM	Connect to test point ⑦ through FM dummy antenna. Negative side to test point ⑪.	98.00 MHz (40 dB No Mod.)	98.00 MHz (CH3)	Connect vert. amp. of scope to test point ⑨. Negative side to test point ⑦.	T10	Adjust T10 for 0 ±0.05 V electronics voltmeter reading.

■ SW IF, LW IF TRAP ALIGNMENT

	BAND	SIGNAL GENERATOR or SWEEP GENERATOR		FREQUENCY DISPLAY SETTING	INDICATOR (ELECTRONICS VOLTMETER or SCOPE)	ADJUSTMENT	REMARKS
		CONNECTIONS	FREQUENCY				
				AM-IF (1st) ALIGNMENT			
(10)	AM	⑦ ... (+) ⑪ ...(−)	55.845 MHz 95 dB, 4% Mod. with 1 kHz (Frequ. Mod.)	10.000 MHz (CH1)	Connect vert. amp. of scope to test point ⑦. Negative side to test point ⑪.	T3 (1st) T4 (2nd)	Adjust for flat and maximum output.
(11)	AM	⑦ ...(+) ⑪ ...(−)	10.000 MHz 30% Mod. with 400 Hz (Ampli. Mod.)	10.000 MHz (CH1)	Output meter across Voice coil.	T5 (3rd)	Adjust for maximum output.
				AM-IF (2nd) ALIGNMENT			
(12)	AM	Fashion loof of several turns of wire and radiate signal into loop of receiver.	450 kHz 30% Mod. with 400 Hz.	Point of noninterference. (on/about 600 kHz).	Output meter across Voice coil.	T9 (1st) T8 (2nd)	Adjust for maximum output.

■ ALIGNMENT POINT

• Please refer to Circuit Board and Wiring Connection Diagram for test point locations.



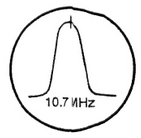


Fig. 1

Fig. 2

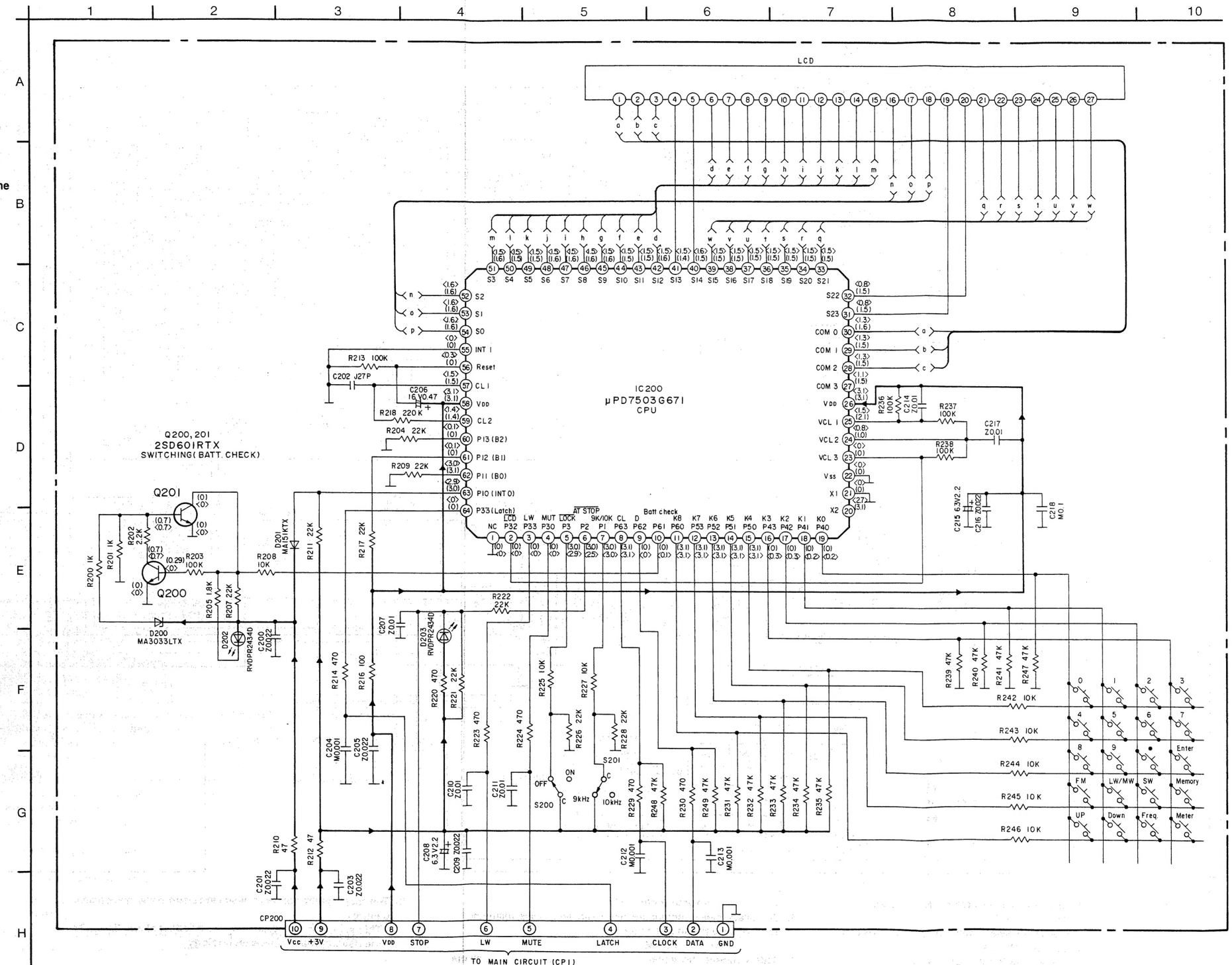
▼ Be sure to fold at the (▼) mark so that mark is on the outside.

SCHEMATIC DIAGRAM

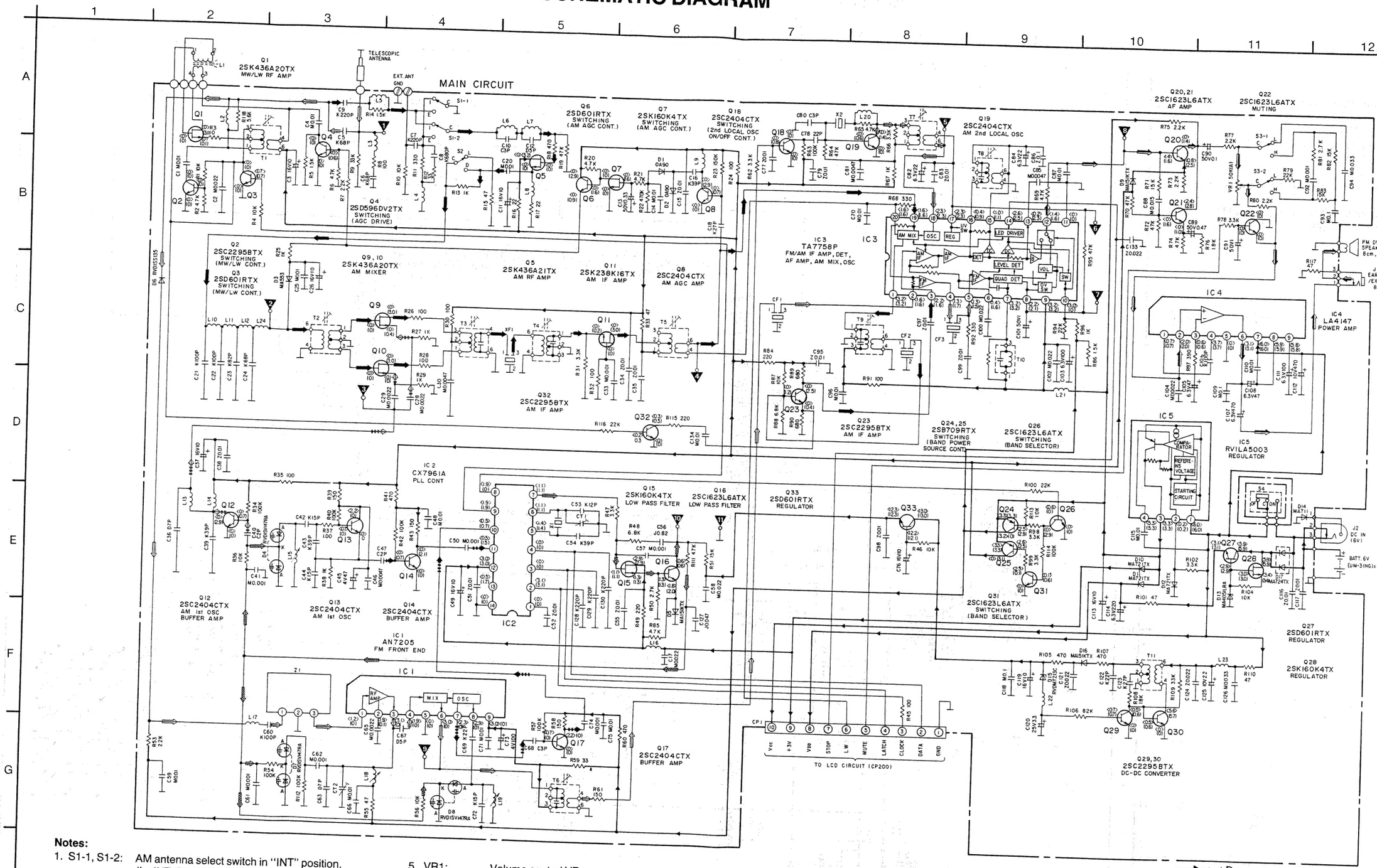
Notes:

1. S200: Lock switch in "OFF" position.
2. S201: MW frequency step select switch in "9 kHz" position. (1...9 kHz, 2...10 kHz)
3. DC voltage measurement are taken with electronics voltmeter from negative terminal of battery.
   < >...FM, ( )...AM
4. The supply parts number is described alone in the replacement parts list.
   - **This schematic diagram may be modified at any time with the development of new technology.**

: +B Line



SCHEMATIC DIAGRAM



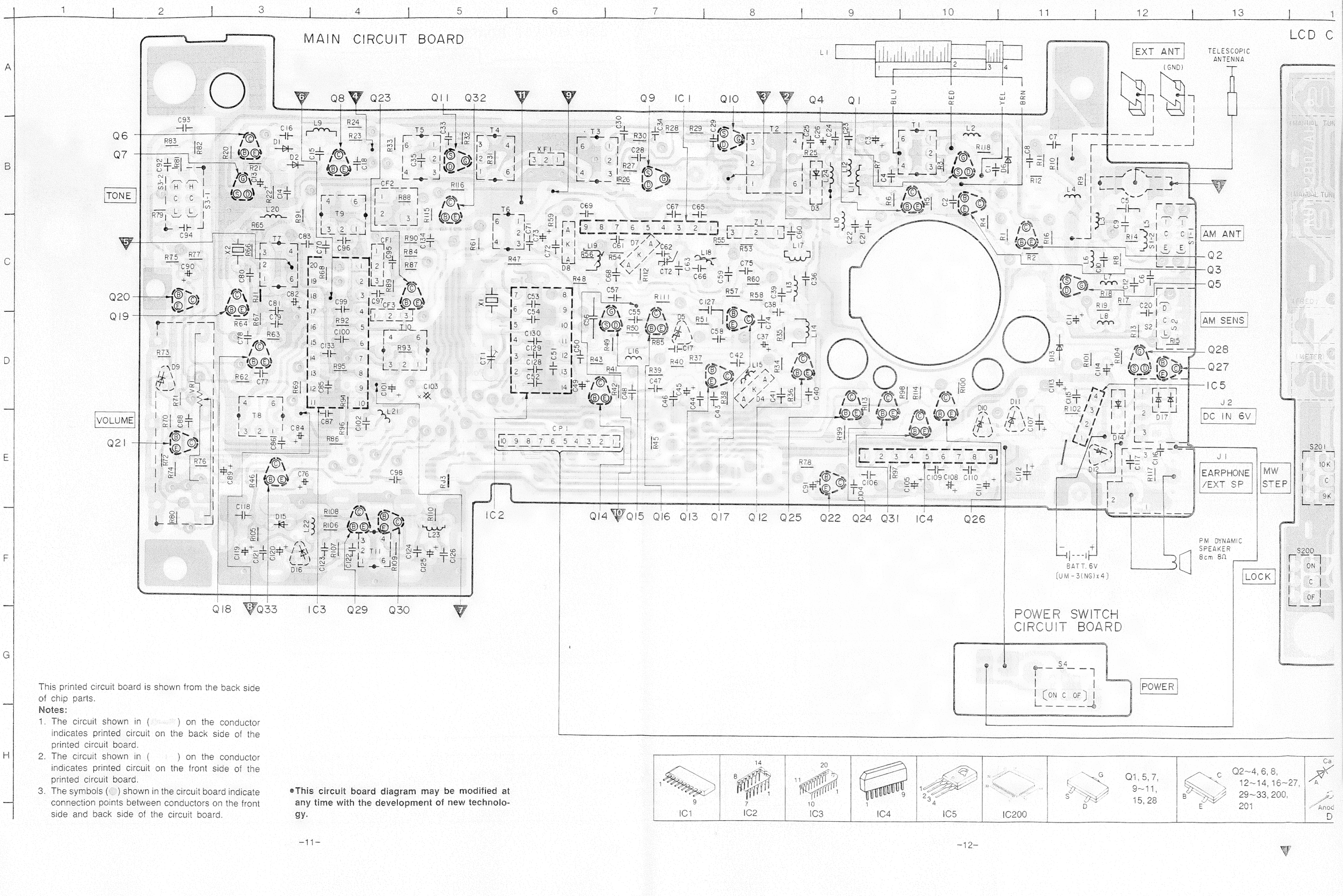
Notes:

1. S1-1, S1-2: AM antenna select switch in "INT" position. (I...INT, E...EXT)
2. S2: AM sensitivity select switch in "LOCAL" position. (L...LOCAL, D...DX)
3. S3-1, S3-2: Tone select switch in "LOW" position. (L...LOW, H...HIGH)
4. S4: Power switch in "OFF" position.
5. VR1: Volume control VR.
6. DC voltage measurement are taken with electronics voltmeter from negative terminal of battery.
   < >...FM, ( )...AM
7. Battery current: No signal ..... 55 mA
   Maximum output FM ..... 204 mA
   AM ..... 133 mA
8. The supply parts number is described alone in the replacement parts list.

•This schematic diagram may be modified at any time with the development of new technology.

: +B
: FM Signal Line
: AM Signal Line
: AM/FM Signal Line
: FM/MW/SW V cap Signal Line
: AM 1st OSC Signal Line
: PLL Control Signal Line
: AM 2nd OSC Signal Line

CIRCUIT BOARD AND WIRING CONNECTION DIAGRAM



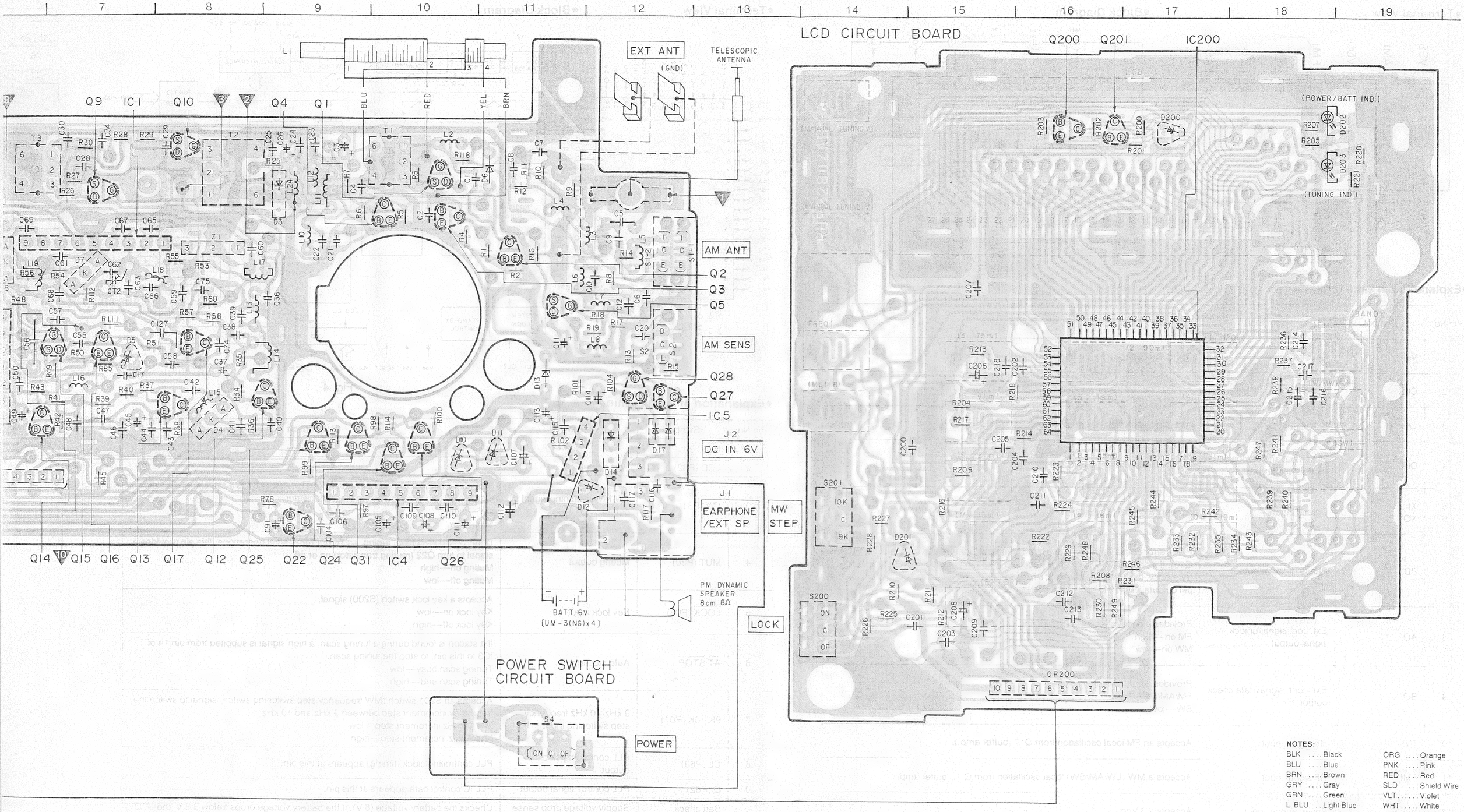
This printed circuit board is shown from the back side of chip parts.

Notes:

1. The circuit shown in ( ) on the conductor indicates printed circuit on the back side of the printed circuit board.
2. The circuit shown in ( ) on the conductor indicates printed circuit on the front side of the printed circuit board.
3. The symbols ( ) shown in the circuit board indicate connection points between conductors on the front side and back side of the circuit board.

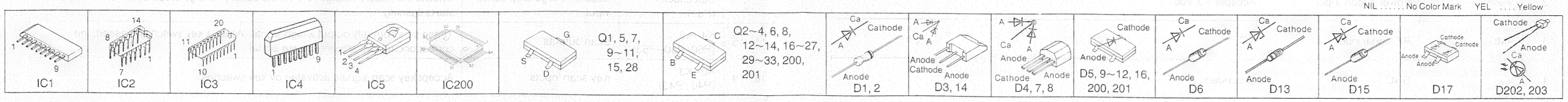
•This circuit board diagram may be modified at any time with the development of new technology.

CIRCUIT BOARD AND WIRING CONNECTION DIAGRAM



NOTES:

BLK	Black	ORG	Orange
BLU	Blue	PNK	Pink
BRN	Brown	RED	Red
GRY	Gray	SLD	Shield Wire
GRN	Green	VLT	Violet
L. BLU	Light Blue	WHT	White
NIL	No Color Mark	YEL	Yellow



IC FUNCTION CHART (IC2: CX7961A)

•Terminal View

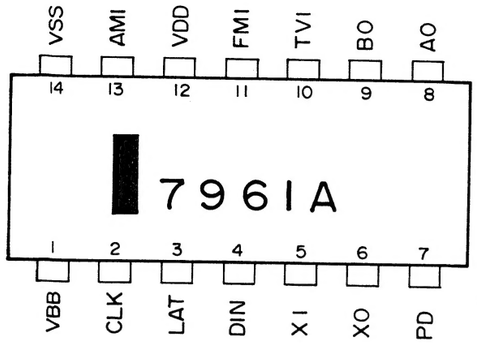


Fig. 1

•Block Diagram

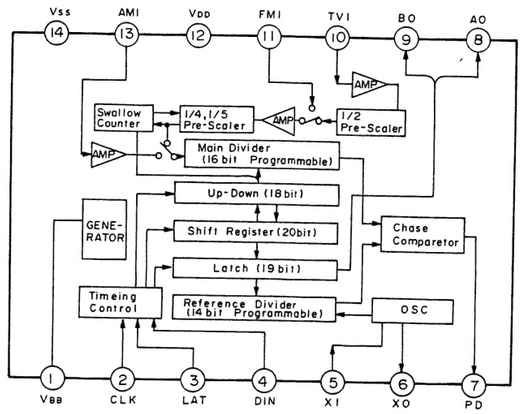


Fig. 2

•Explanation of each terminal

Pin No.	Symbol	Terminal	Description
1	V_{BB}	Substrate pin	Accepts a capacitor for reference voltage.
2	CLK	Clock input	Accepts a clock signal from pin 8 of IC200 (CPU).
3	LAT	Latch input	Accepts a latch signal from pin 64 of IC200 (CPU).
4	DIN	Data input and up/down mode switching input	Accepts data from pin 9 of IC200 (CPU).
5 6	XI XO	Crystal inputs	Accepts a crystal (4.5 MHz).
7	PD	Phase detector output	PLL's error output appears at this pin. The output signal is applied to a L.P.F. (Q15, Q16). If a divided OSC frequency (received frequency) exceeds the reference frequency, this pin outputs a high; if it is lower than the reference frequency, this pin outputs a low. If the two frequencies match, the pin floats.
8	AO	Ext. con. signal/unlock signal output	Provides a band mode switching signal: FM on—high MW on—low
9	BO	Ext. cont. signal/data check output	Provides a band switching signal: FM/AM/LW—high SW—low
10	TVI	RF signal input	Accepts an FM local oscillation from Q17 (buffer amp.).
11	FMI	RF signal input	Accepts a MW (LW/AM/SW) local oscillation from Q14 (buffer amp.).
12	V_{DD}	Power supply input	Accepts +3 Vdc.
13	AMI	RF signal input	NC
14	V_{SS}	GND	Grounded.

IC FUNCTION CHART (IC200: UPD7503G671)

•Terminal View

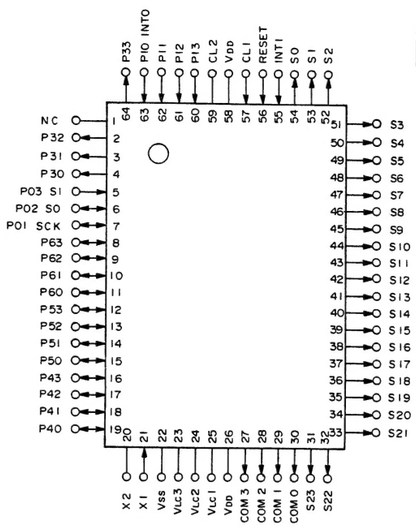


Fig. 3

•Block Diagram

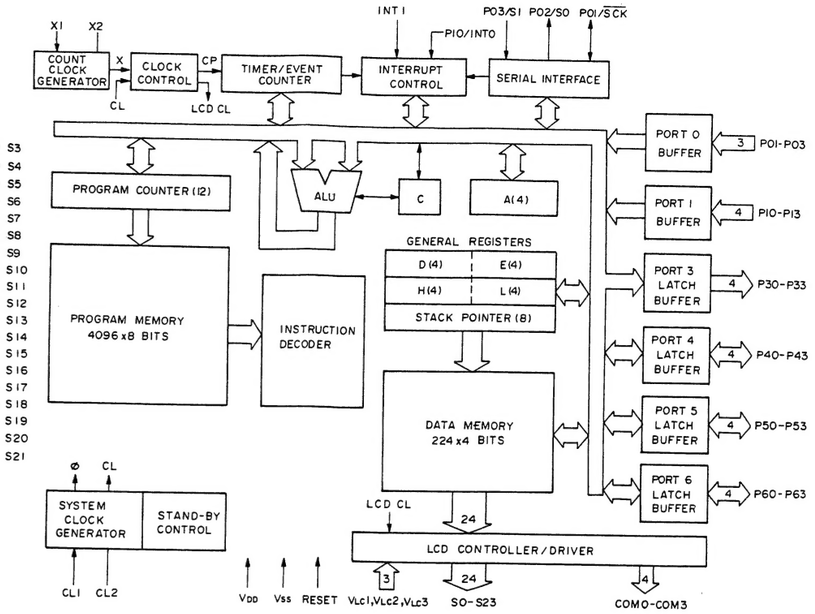
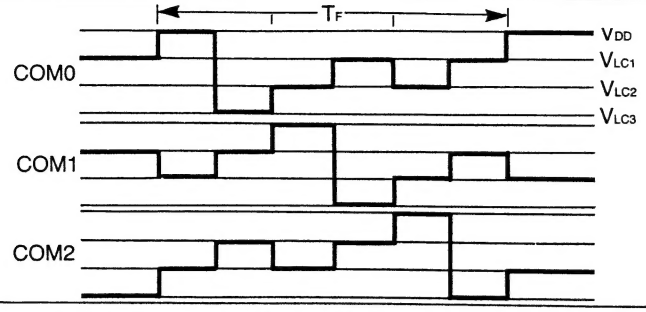


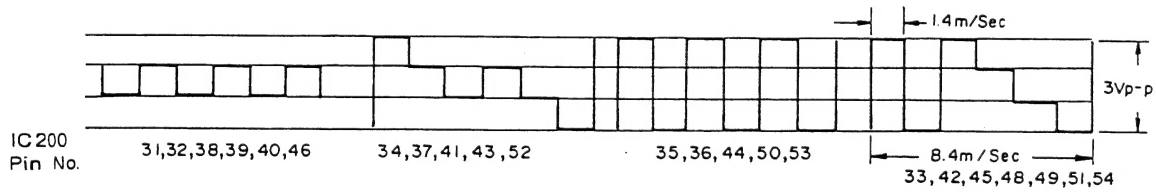
Fig. 4

•Explanation of each terminal

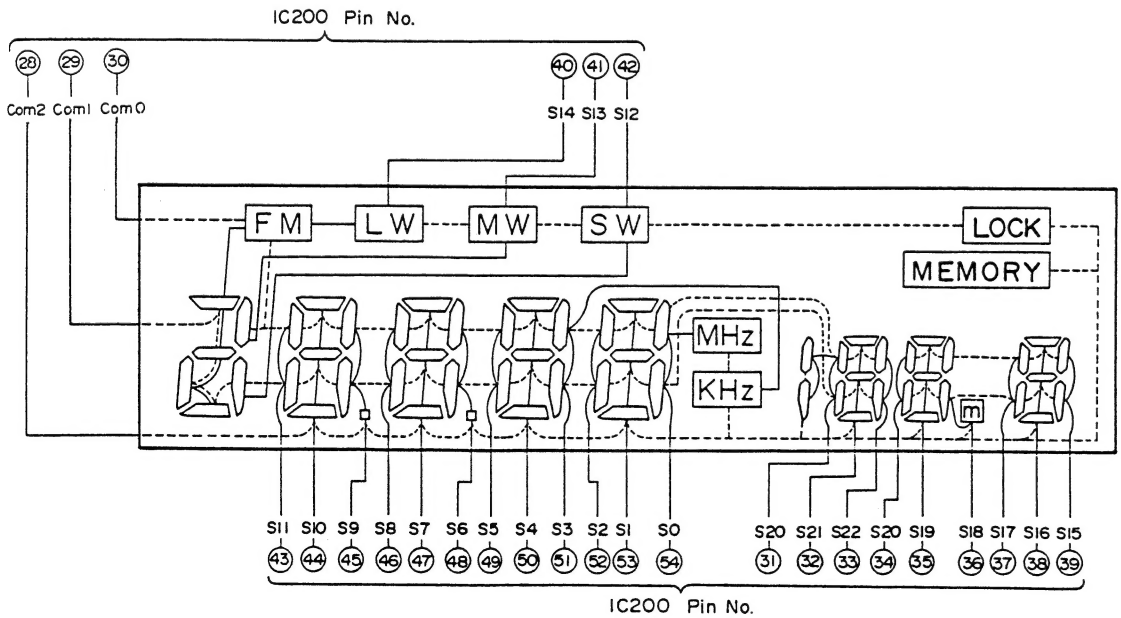
Pin No.	Symbol	Terminal	Description
1	NC	———	———
2	$\overline{\text{LCD}}$ (P32)	Port output	———
3	LW (P31)	LW/MW switching signal output	Provides a high for LW and a low for MW. This output turns a switching transistor, Q18, on/off to control the second local oscillator. LW—high MW—low
4	MUT (P30)	Muting output	During band switching, tuning, and other transiental operations, this pin provides a signal to turn Q22 (muting transistor) on or off. Muting on—high Muting off—low
5	$\overline{\text{LOCK}}$ (P03)	Key lock input	Accepts a key lock switch (S200) signal. Key lock on—low Key lock off—high
6	$\overline{\text{AT STOP}}$	Auto stop input	If a station is found during a tuning scan, a high signal is supplied from pin 14 of IC3 to this pin, to stop the tuning scan. Tuning scan busy—low Tuning scan end—high
7	9K/10K (P01)	9 kHz/10 kHz frequency step switching input	Accepts an S201 switch (MW frequency step switching switch) signal to switch the frequency increment step between 9 kHz and 10 kHz. MW 10 kHz increment step—low MW 9 kHz increment step—high
8	CL (P63)	PLL controlling clock output	PLL controlling clock (timing) appears at this pin.
9	D (P62)	PLL control signal output	PLL IC control data appears at this pin.
10	Batt check (P61)	Supply voltage drop sense input	Checks the battery voltage (6 V). If the battery voltage drops below 3.8 V, the LCD starts flashing.
11~15	K4–K8 (P60, P50–P53)	Scan outputs	These pins normally output a high signal. When a key switch is pressed, the corresponding pin delivers a pulse signal.
16~19	K0–K3 (P40–P43)	Key scan inputs	Accept key scan signals activated by key switches.

Pin No.
20
21
22
23~25
26
27
28
29
30
31~54
55
56
57
59
58
60~62
63
64

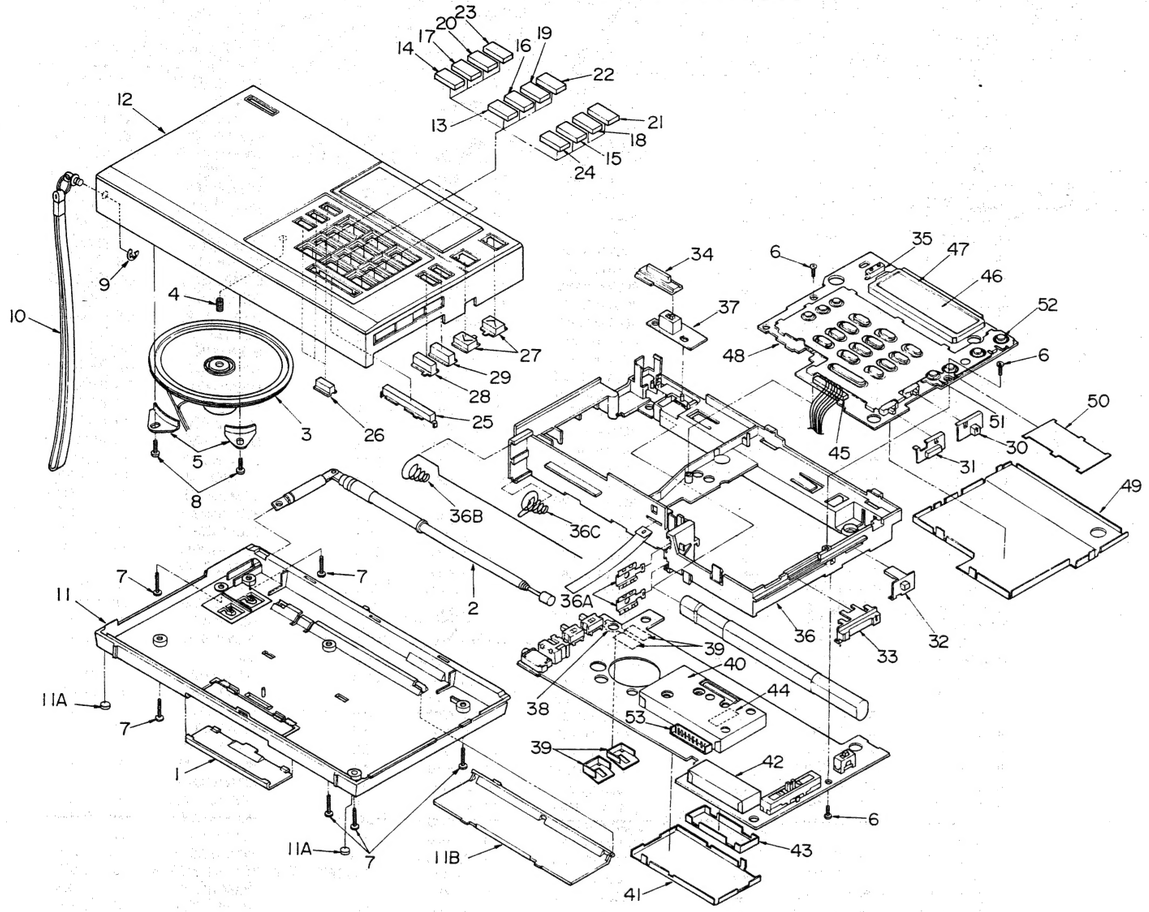
Pin No.	Symbol	Terminal	Description
20 21	X1 X2	Crystal inputs	———
22	V_{SS}	GND	Ground pin.
23~25	CL3–CL1	LCD power supply input	Accepts LCD driving power supply.
26	V_{DD}	Power supply input	Accepts +3 Vdc.
27	COM3	Common output	NC
28 29 30	COM2 COM1 COM0	LCD common signal output	
31~54	S0–S23	LCD segment outputs	The output waveforms appearing at these pins differ from each other depending on the segment and display data (see Fig. 5).
55	INT1	Ext. interrupt input	To be grounded.
56	RESET	Reset input	Accepts a time constant R213 (100 kΩ)/C206 (0.47 µF) to reset the device at power on.
57 59	CL1 CL2	System clock time constant inputs	Accept C202 (27 pF) and R218 (220 kΩ) to provide a time-base frequency for the timer and counter.
58	V_{DD}	Power supply input	Accepts +3 Vdc.
60~62	B0–B2 (P11–P13)	Destination selecting inputs	Used to select frequency bands for different destination countries by applying high and low signals.
63	INT0 (P10)	Power on/off signal input	Used to check power is applied to the device.
64	Latch (P33)	Latch signal output	Provides an end-control signal to the external PLL IC (CX7961A).



LIQUID CRYSTAL DISPLAY (LCD)



CABINET PARTS LOCATION



CABINET PARTS LIST

Ref. No.	Part No.	Part Code	Description
CABINET AND CHASSIS			
1	1KKAB40ZA-0	015 820 8847 2	BATTERY COVER
2	XEARS125GB-Y	002 390 1650 7	TELESCOPIC ANTENNA
3	RAS8P32ZA-D	001 260 3862 2	SPEAKER
4	RUQ98ZA	015 726 3117 6	SPRING
5	RMS12B	015 632 5726 0	ANGLE
6	XTNR2+5C	005 501 4869 9	SCREW
7	XTN26+14JFZ	005 501 2663 9	SCREW
8	XTN26+8B	005 501 0320 7	SCREW
9	XUC3FT	005 512 0137 3	E RING
10	RKH146ZA	015 826 1147 1	HAND STRAP
11	RYFFB40LX	015 802 3229 4	REAR CABINET ASS'Y
11A	RHG348ZA	015 653 1127 6	RUBBER
11B	RKL33ZA-0	015 828 0133 1	STAND
12	RYMFB40LX	015 800 6753 7	FRONT CABINET ASS'Y
13	RBC1023PA	015 702 4009 7	BUTTON, ( )
14	RBC1023QA	015 702 4010 4	BUTTON, (0)
15	RBC1023RA	015 702 4011 3	BUTTON, (9)
16	RBC1023SA	015 702 4012 2	BUTTON, (8)
17	RBC1023TA	015 702 4013 1	BUTTON, (7)
18	RBC1023UA	015 702 4014 0	BUTTON, (6)
19	RBC1023VA	015 702 4015 9	BUTTON, (5)
20	RBC1023WA	015 702 4016 8	BUTTON, (4)
21	RBC1023XA	015 702 4017 7	BUTTON, (3)
22	RBC1023YA	015 702 4018 6	BUTTON, (2)
23	RBC1023ZA	015 702 4019 5	BUTTON, (1)
24	RBC10230A	015 702 4080 0	BUTTON, (M)
25	RBC1032ZB-0	015 702 4777 4	BUTTON, ENTER
26	RBC1185ZA-0	015 702 4778 3	BUTTON, BAND
27	RBC1186ZA-0	015 702 4779 2	BUTTON, TUNING
28	RBC1187ZA-0	015 702 4780 9	BUTTON, METER
29	RBC1188ZA-0	015 702 4781 8	BUTTON, FREQ
30	RBD429ZA	015 700 4330 1	KNOB, MW STEP
31	RBD430ZA	015 700 4331 0	KNOB, LOCK
32	RBD432ZA	015 700 4333 8	KNOB, TONE
33	RBD433ZA	015 700 4334 7	KNOB, VOLUME
34	RBD494ZA-0	015 700 4741 6	KNOB, POWER
35	RMP276ZA	015 652 1513 5	HOLDER
36	RZAFB40LX	015 630 2632 7	CHASSIS ASS'Y
36A	RJC30010Z		BATTERY TERMINAL
36B	RJC70021ZA	003 413 1716 4	BATTERY TERMINAL
36C	RJC70022ZA	003 413 1717 3	BATTERY TERMINAL
37	RUP2279ZAH	015 630 2631 8	P.C.B.
38	RJT1073ZA		TERMINAL
39	RJT1093ZA	003 413 1718 2	TERMINAL
40	RMC1145ZA	015 601 1141 8	SHIELD PLATE
41	RMC1146ZA	015 601 1136 5	SHIELD PLATE
42	RMC1147ZA	015 601 1137 4	SHIELD PLATE
43	RMC1148ZA	015 601 1138 3	SHIELD PLATE
44	RMC1162ZA	015 601 1139 2	SHIELD PLATE
45	1JSAB40ZA	015 934 0113 2	REED WIRE
46	RYKFB40LX	001 080 0398 9	DISPLAY
47	RME456ZA	015 632 6720 2	ANGLE
48	RMC1143ZA	015 601 1134 7	SHIELD PLATE
49	RMC1144ZA	015 601 1135 6	SHIELD PLATE
50	RMC1178ZA	015 601 1140 9	SHIELD PLATE
51	RHG5052ZA	015 653 1224 6	RUBBER
52	RHG5053ZA	015 653 1226 4	RUBBER
53	RJP10G20Z	003 402 2528 3	PLUG, (10P)

ACCESSARY AND PACKING PARTS LIST

Notes:

1. Important safety notice
   Components identified by ⚠ mark have special characteristics important for safety.
   When replacing any of these components, use only manufacturer's specified parts.
2. The letter in square brackets in the Ref. No. column indicates the shipping destination.
   [X]...For Asia, Latin America, Middle East and Africa areas. [XL]...For Australia.

Ref. No.	Part No.	Part Code	Description
PACKINGS			
P1	RPN5350ZA	015 977 3500 4	CUSHION
P2	RPN5351ZA	015 977 3501 3	CUSHION
P3	RPK2549ZA	015 972 2157 8	CARTON BOX
P4	XZB18X25A01	015 978 0746 1	PROTECTION COVER
P5	RPE681ZA	015 977 3503 1	SPACER
ACCESSORIES			
A1	RSA805ZA	002 390 1649 0	ANTENNA CORD
A2 ⚠ (X)	RJP120ZS	003 402 1803 7	PLUG
A3	XEH1A1-AB	001 262 0246 2	EARPHONE
A4 ⚠ (XL)	RD8496AXL	015 914 0119 8	AC ADAPTOR
A4 ⚠ (X)	RD9496XR	015 914 0274 8	AC ADAPTOR
A5	RQX5011ZA	015 983 5085 4	INSTRUCTION MANUAL
A6	RQD248ZA-0	015 910 3160 5	CARRYING CASE

ELECTRICAL PARTS LIST

Ref. No.	Part No.	Part Code	Description
INTEGRATED CIRCUITS			
IC1	AN7205	001 061 0362 8	I.C. FM RF
IC2	CX7961A	001 061 5650 3	I.C. PLL
IC3	TA7758P		I.C. AM FM IF
IC4	LA4147		I.C. AM POWER
IC5	RVILA5003	001 061 0453 6	I.C. REGULATOR
IC200	UPD7503G671	001 061 5653 0	I.C. CPU
TRANSISTORS			
Q1	2SK436A20TX	001 030 7268 0	TRANSISTOR
Q2	2SC2295B	001 030 1266 6	TRANSISTOR
Q3	2SD601RTX	001 030 7094 4	TRANSISTOR
Q4	2SD596DV2TX	001 030 7473 7	TRANSISTOR
Q5	2SK436A21TX	001 030 7476 4	TRANSISTOR
Q6	2SD601RTX	001 030 7094 4	TRANSISTOR
Q7	2SK160K4TX	001 030 7474 6	TRANSISTOR
Q8	2SC2404CTX	001 030 7310 5	TRANSISTOR
Q9, Q10	2SK436A20TX	001 030 7268 0	TRANSISTOR
Q11	2SK238K16TX	001 030 7475 5	TRANSISTOR
Q12, Q13	2SC2404CTX	001 030 7310 5	TRANSISTOR
Q14	2SC2404CTX	001 030 7310 5	TRANSISTOR
Q15	2SK160K4TX	001 030 7474 6	TRANSISTOR
Q16	2SC1623L6ATX	001 030 7071 1	TRANSISTOR
Q17, Q18	2SC2404CTX	001 030 7310 5	TRANSISTOR
Q19	2SC2404CTX	001 030 7310 5	TRANSISTOR
Q20, Q21	2SC1623L6ATX	001 030 7071 1	TRANSISTOR
Q22	2SC1623L6ATX	001 030 7071 1	TRANSISTOR
Q23	2SC2295B	001 030 1266 6	TRANSISTOR
Q24, Q25	2SB709S	001 030 0734 3	TRANSISTOR
Q26	2SC1623L6ATX	001 030 7071 1	TRANSISTOR
Q27	2SD601RTX	001 030 7094 4	TRANSISTOR
Q28	2SK160K4TX	001 030 7474 6	TRANSISTOR
Q29, Q30	2SC2295B	001 030 1266 6	TRANSISTOR
Q31	2SC1623L6ATX	001 030 7071 1	TRANSISTOR
Q32	2SC2295B	001 030 1266 6	TRANSISTOR
Q33, Q200	2SD601RTX	001 030 7094 4	TRANSISTOR
Q201	2SD601RTX	001 030 7094 4	TRANSISTOR
DIODES			
D1, D2	0A90	001 032 2718 5	DIODE
D3	MA553	001 032 4971 6	DIODE
D4	RVD1SV147RA	001 033 0386 8	DIODE
D5	MA151KTX	001 032 7613 3	DIODE
D6	RVD1SS135	001 032 6340 3	DIODE
D7, D8	RVD1SV147RA	001 033 0386 8	DIODE
D9	MA151KTX	001 032 7613 3	DIODE
D10, D11	MA721	001 033 0163 1	DIODE
D12	MA721	001 033 0163 1	DIODE
D13	MA4051LRA	001 033 0384 0	DIODE
D14	MA711	001 032 8534 7	DIODE
D15	RVDMTZ13C	001 033 0084 9	DIODE
D16	MA151KTX	001 032 7613 3	DIODE
D17	MA724TX	001 033 0385 9	DIODE
D200	MA3033LTX	001 033 0383 1	DIODE
D201	MA151KTX	001 032 7613 3	DIODE
D202, D203	RVDPR2434D	001 032 3539 2	DIODE
VARIABLE RESISTORS			
VR1	EWAMF0X05A54	001 174 9085 6	V.R. VOLUME
VARIABLE CAPACITORS			
CT1	RCV20AF1	001 142 0571 1	TRIMMER
CT2	RCV10AF1	001 142 0569 5	TRIMMER CAPACITOR
COILS AND TRANSFOMERS			
L1	RLF6D19-0	001 214 1623 3	BAR ANTENNA
L2	RLQZN680K-D		COIL
L3	RLQZN181K-D	001 211 4339 7	COIL
L4	RLQZN220K-D		COIL
L5	RLQZN6R8K-D	001 211 4340 4	COIL
L6	RLQZN1R0K	001 210 9900 9	COIL
L7	RLQZNR47M-D	001 211 4337 9	COIL
L8	RLQZN221K-D		COIL
L9	RLQY10G5	001 210 1354 5	COIL
L10	RLQY7S5	001 210 1401 5	COIL
L11	RLQZPR82ML-Y	001 211 4341 3	COIL
L12	RLQZN1R2K-D	001 211 4338 8	COIL
L13	RLQZPR22M	001 210 9906 3	COIL
L14	RLQZPR56ML-Y		COIL
L15	RL04N234-0	001 211 4343 1	COIL
L16	RLQZN101K		COIL
L17	RLQY25S5	001 210 1383 0	COIL
L18	RL04N125	001 210 1768 7	COIL
L19	RL04N239-0	001 211 4344 0	COIL
L20	RLQY15G5	001 210 9796 1	COIL
L21	RLQZN470K-D		COIL
L22	RLQZN101K		COIL
L23	RLQZN221K-D		COIL
L24	RLQZP1R2ML-Y	001 211 4342 2	COIL
T1	RLA6C1-T		COIL
T2	RLA3Z11-0		COIL
T3, T4	RLI3A4-M	001 215 3254 5	I.F.TRANSFORMER
T5	RLI3A3-T		I.F.TRANSFORMER
T6	RLI4A4	001 215 2484 7	I.F.TRANSFORMER
T7	RL03A12-T	001 211 4010 9	COIL
T8	RLI2A34-T		I.F.TRANSFORMER
T9	RLI2A35-T		I.F.TRANSFORMER
T10	RLI4A33-T		I.F.TRANSFORMER
T11	RL09A11-T	001 211 4065 4	COIL
COMPONENT COMBINATIONS			
Z1	RXABPMB8	001 230 1488 0	COMPONENTS COMBINATION
FILTERS			
CF1	RVF107WAZ	001 241 0408 9	CERAMIC FILTER
CF2	SVF450U11-M	001 241 1442 3	CERAMIC FILTER
CF3	RVF107WAZ	001 241 0408 9	CERAMIC FILTER
XF1	RVX55M845A	001 241 1443 2	CERAMIC FILTER
SWITCHES			
S1, S2	RSS2B43Y	003 431 2695 6	SW, ANT/SENS
S3, S4	RSS2B60ZA-M	003 431 3857 2	SW, TONE/POWER
S200, S201	RSS2B40Z	003 431 2692 9	SW, LOCK/STEP
OTHERS			
J1	QJA0199	003 400 5175 6	JACK, EP
J2	RJJ1B1Z	003 400 5292 2	JACK, DC
X1	RVCE4500NZW	001 141 0622 2	CRYSTAL
X2	RVCA55395NRW	001 141 0621 3	CRYSTAL

D

RESISTOR AND CAPACITOR PARTS LIST

Numbering System of Resistor

Example:

ERD	25	F	J	101
Type	Wattage	Shape	Tolerance	Value (100Ω)

ERJ	6G	C	J	2R2
Type	Wattage	Shape	Tolerance	Value (2.2Ω)

Resistor Type		Wattage	Tolerance
ERD:	Carbon Resistor	10 : 1/8W	F : ±1%
ERC:	Solid Resistor	25 : 1/4W	G : ±2%
ERF:	Incombustible Box-Shaped Wire-Wound Resistor	50 : 1/2W	J : ±5%
		18 : 1/8W	K : ±10%
		14 : 1/4W	M : ±20%
		12 : 1/2W	
ERG:	Metal Oxide-Film Resistor	1 : 1W	
		2 : 2W	
ERM:	Wire-Wound Resistor	3 : 3W	
		S1 : 1/2W	
ERO:	Superstable Metal Film Resistor	S2 : 1/4W	
		6G : 1/10W	
		8G : 1/8W	
ERX:	Metal-Film Resistor		
RRJ: ERJ:	Chip Resistor		

※ Capacity are in microfarads (μF) unless specified otherwise, P=Pico-farads.
※ Resistance are in ohms (Ω), unless specified otherwise, 1K=1,000Ω, 1M=1,000KΩ

Numbering System of Capacitor

Example:

ECKD	1H	102	Z	F
Type	Voltage	Value (1000pF)	Tolerance	Peculiarity

ECEA	50	M	R47
Type	Voltage	Peculiarity	Value (0.47μF)

Capacitor Type		Voltage	Tolerance
ECCD:	Ceramic Capacitor (Chitacon)	(ECCD, ECKD Type)	K : ±10%
ECKD:	Ceramic Capacitor (Chitabari)	1H : 50V DC 2H : 500V DC	M : ±20%
ECFD:	Semiconductor Ceramic Capacitor	(ECFD Type)	Z : +80% −20%
ECE□:	Electrolytic Capacitor	C : 12V DC D : 25V DC	J : ±5%
ECS□:	Tantalum Fixed Electrolytic Capacitor	E : 50V DC	G : ±2%
ECQ□:	Polystyrenc Film Capacitor	(ECQ Type)	F : ±1%
ECQS:	Polystyrene Film Capacitor	05 : 50WV DC 1 : 100WV DC	C : ±0.25pF
ECQS:	Polypropylene Film Capacitor	(ECE, ECS Type)	D : ±0.5pF
ECQV:	T.F Capacitor	0G : 4V 0J : 6.3V	
ECU□: RCU□:	Chip Capacitor	1A : 10V 1C : 16V	
ECBT:	Cylindrical Ceramic Capacitor	1E : 25V 1V : 35V	
		1H : 50V 1J : 63V	
		2A : 100V	

Ref. No.	Part No.	Part Code
RESISTORS		
R1	RRJ6GCJ103TE	001 151 6750 5
R2	RRJ6GCJ472TE	001 151 6751 4
R3	RRJ6GCJ100TE	001 151 6749 8
R4	RRJ6GCJ103TE	001 151 6750 5
R5	RRJ6GCJ152	001 152 5878 9
R6	RRJ6GCJ472TE	001 151 6751 4
R7	RRJ6GCJ222TE	001 151 7172 3
R8	RRJ6GCJ101TE	001 151 7162 5
R9	RRJ6GCJ333	001 152 5867 2
R10	RRJ6GCJ103TE	001 151 6750 5
R11	RRJ6GCJ331TE	001 151 7177 8
R12	RRJ6GCJ330	001 152 5882 3
R13	RRJ6GCJ102TE	001 151 7163 4
R14	RRJ6GCJ152	001 152 5878 9
R15	RRJ6GCJ470TE	001 151 7180 3
R16, R17	RRJ6GCJ220TE	001 151 7171 4
R18	RRJ6GCJ471TE	001 151 7181 2
R19	RRJ6GCJ473TE	001 151 6450 4
R20, R21	RRJ6GCJ472TE	001 151 6751 4
R22	RRJ6GCJ474	001 152 5869 0
R23	RRJ6GCJ154	001 152 5880 5
R24	RRJ6GCJ101TE	001 151 7162 5
R25	RRJ6GCJ102TE	001 151 7163 4
R26	RRJ6GCJ101TE	001 151 7162 5
R27	RRJ6GCJ102TE	001 151 7163 4
R28	RRJ6GCJ101TE	001 151 7162 5
R29	RRJ6GCJ102TE	001 151 7163 4
R30	RRJ6GCJ101TE	001 151 7162 5
R31	RRJ6GCJ332TE	001 151 7178 7
R32	RRJ6GCJ101TE	001 151 7162 5
R33	RRJ6GCJ470TE	001 151 7180 3
R34	RRJ6GCJ104TE	001 151 7164 3
R35	RRJ6GCJ101TE	001 151 7162 5
R36	RRJ6GCJ103TE	001 151 6750 5
R37	RRJ6GCJ101TE	001 151 7162 5
R38	RRJ6GCJ102TE	001 151 7163 4
R39	RRJ6GCJ151TE	001 151 7168 9
R40	RRJ6GCJ104TE	001 151 7164 3
R41	RRJ6GCJ471TE	001 151 7181 2
R42	RRJ6GCJ104TE	001 151 7164 3
R43	RRJ6GCJ151TE	001 151 7168 9
R45	RRJ6GCJ101TE	001 151 7162 5
R46	RRJ6GCJ103TE	001 151 6750 5
R47	RRJ6GCJ332TE	001 151 7178 7
R48	RRJ6GCJ682TE	001 151 7187 6
R49	RRJ6GCJ221TE	001 151 6507 4
R50	RRJ6GCJ272TE	001 151 7175 0
R51	RRJ6GCJ153	001 152 5879 8
R53	RRJ6GCJ222TE	001 151 7172 3
R54	RRJ6GCJ104TE	001 151 7164 3
R55	RRJ6GCJ470TE	001 151 7180 3
R56	RRJ6GCJ103TE	001 151 6750 5
R57	RRJ6GCJ104TE	001 151 7164 3
R58	RRJ6GCJ151TE	001 151 7168 9
R59	RRJ6GCJ330	001 152 5882 3
R60	RRJ6GCJ471TE	001 151 7181 2
R61	RRJ6GCJ151TE	001 151 7168 9
R62	RRJ6GCJ332TE	001 151 7178 7
R63	RRJ6GCJ104TE	001 151 7164 3
R64	RRJ6GCJ473TE	001 151 6450 4
R65	RRJ6GCJ472TE	001 151 6751 4
R66	RRJ6GCJ332TE	001 151 7178 7
R67	RRJ6GCJ102TE	001 151 7163 4
R68	RRJ6GCJ331TE	001 151 7177 8
R69	RRJ6GCJ472TE	001 151 6751 4
R70	RRJ6GCJ473TE	001 151 6450 4
R71	RRJ6GCJ153	001 152 5879 8
R72	RRJ6GCJ473TE	001 151 6450 4
R73	RRJ6GCJ222TE	001 151 7172 3
R74	RRJ6GCJ472TE	001 151 6751 4
R75	RRJ6GCJ222TE	001 151 7172 3
R76	RRJ6GCJ182	001 152 5881 4
R77	RRJ6GCJ222TE	001 151 7172 3
R78	RRJ6GCJ332TE	001 151 7178 7
R79	RRJ6GCJ223TE	001 151 7173 2
R80	RRJ6GCJ222TE	001 151 7172 3
R81	RRJ6GCJ272TE	001 151 7175 0
R82, R83	RRJ6GCJ153	001 152 5879 8
R84	RRJ6GCJ221TE	001 151 6507 4
R85	RRJ6GCJ472TE	001 151 6751 4
R86	RRJ6GCJ152	001 152 5878 9
R87	RRJ6GCJ103TE	001 151 6750 5
R88	RRJ6GCJ682TE	001 151 7187 6
R89, R90	RRJ6GCJ681TE	001 151 7186 7
R91	RRJ6GCJ101TE	001 151 7162 5
R92	RRJ6GCJ331TE	001 151 7177 8
R93	RRJ6GCJ332TE	001 151 7178 7
R94	RRJ6GCJ223TE	001 151 7173 2
R95	RRJ6GCJ473TE	001 151 6450 4
R96	RRJ6GCJ102TE	001 151 7163 4
R97	RRJ6GCJ391TE	001 151 6700 5
R98, R99	RRJ6GCJ332TE	001 151 7178 7
R100	RRJ6GCJ223TE	001 151 7173 2
R101	RRJ6GCJ470TE	001 151 7180 3
R102	RRJ6GCJ332TE	001 151 7178 7
R104	RRJ6GCJ103TE	001 151 6750 5
R105	RRJ6GCJ471TE	001 151 7181 2
R106	RRJ6GCJ823TE	001 151 7190 1
R107	RRJ6GCJ471TE	001 151 7181 2
R108	RRJ6GCJ182	001 152 5881 4
R109	RRJ6GCJ333	001 152 5867 2
R110	RRJ6GCJ470TE	001 151 7180 3
R111	RRJ6GCJ472TE	001 151 6751 4
R112	RRJ6GCJ104TE	001 151 7164 3
R113	RRJ6GCJ103TE	001 151 6750 5
R114	RRJ6GCJ104TE	001 151 7164 3
R115	RRJ6GCJ221TE	001 151 6507 4
R116	RRJ6GCJ223TE	001 151 7173 2
R117	RRJ6GCJ470TE	001 151 7180 3
R118	RRJ6GCJ562	001 152 5870 7
R200, R201	RRJ6GCJ102TE	001 151 7163 4
R202	RRJ6GCJ222TE	001 151 7172 3
R203	RRJ6GCJ104TE	001 151 7164 3
R204	RRJ6GCJ223TE	001 151 7173 2
R205	RRJ6GCJ182	001 152 5881 4
R207	RRJ6GCJ223TE	001 151 7173 2
R208	RRJ6GCJ103TE	001 151 6750 5
R209	RRJ6GCJ223TE	001 151 7173 2
R210	RRJ6GCJ470TE	001 151 7180 3
R211	RRJ6GCJ223TE	001 151 7173 2
R212	RRJ6GCJ470TE	001 151 7180 3
R213	RRJ6GCJ104TE	001 151 7164 3
R214	RRJ6GCJ471TE	001 151 7181 2
R216	RRJ6GCJ101TE	001 151 7162 5
R217	RRJ6GCJ223TE	001 151 7173 2
R218	RRJ6GCJ224TE	001 151 7174 1
R220	RRJ6GCJ471TE	001 151 7181 2
R221, R222	RRJ6GCJ223TE	001 151 7173 2

Ref. No.	Part No.	Part Code
R223, R224	RRJ6GCJ471TE	001 151 7181 2
R225	RRJ6GCJ103TE	001 151 6750 5
R226	RRJ6GCJ223TE	001 151 7173 2
R227	RRJ6GCJ103TE	001 151 6750 5
R228	RRJ6GCJ223TE	001 151 7173 2
R229, R230	RRJ6GCJ471TE	001 151 7181 2
R231, R232	RRJ6GCJ473TE	001 151 6450 4
R233, R234	RRJ6GCJ473TE	001 151 6450 4
R235	RRJ6GCJ473TE	001 151 6450 4
R236, R237	RRJ6GCJ104TE	001 151 7164 3
R238	RRJ6GCJ104TE	001 151 7164 3
R239, R240	RRJ6GCJ473TE	001 151 6450 4
R241	RRJ6GCJ473TE	001 151 6450 4
R242, R243	RRJ6GCJ103TE	001 151 6750 5
R244, R245	RRJ6GCJ103TE	001 151 6750 5
R246	RRJ6GCJ103TE	001 151 6750 5
R247, R248	RRJ6GCJ473TE	001 151 6450 4
R249	RRJ6GCJ473TE	001 151 6450 4
RJ1, RJ3	RRJ6GCJ000TE	001 151 7161 6
CAPACITORS		
C1	RCUV1E103MD	001 103 9214 2
C2	RCUV1E223MD	001 103 9216 0
C3	ECEA1CU100	001 120 2905 3
C4	RCUV1E103MD	001 103 9214 2
C5	ECCV1H680KC	001 103 9570 5
C6	RCUV1H680KC	
C7	RCUV1H221K	001 103 9242 8
C8	RCUV1H681KB	001 103 9255 3
C9	RCUV1H221K	001 103 9242 8
C10	RCUV1H030CC	001 103 9223 1
C11	ECEA1CU100	001 120 2905 3
C12	RCUV1H050DC	001 103 9225 9
C13	ECEA1HKR33	001 120 0337 1
C14	RCUV1E103MD	001 103 9214 2
C15	RCUV1H103ZF	001 103 8690 2
C16	RCUV1H390KC	001 103 9249 1
C17	RCUV1E223MD	001 103 9216 0
C18	RCUV1H270KC	001 103 9245 5
C20	RCUV1E103MD	001 103 9214 2
C21, C22	RCUV1H101K	001 103 9229 5
C23	RCUV1H820KC	001 103 9260 6
C24	RCUV1H680KC	
C25	RCUV1E103MD	001 103 9214 2
C26	ECEA1CU100	001 120 2905 3
C28, C29	RCUV1H222MD	001 103 9243 7
C30	RCUV1H472MD	001 103 8780 1
C33	RCUV1H102MD	001 103 9230 2
C34, C35	RCUV1H103ZF	001 103 8690 2
C36	RCUV1H070DC	001 103 8930 5
C37	ECEA1CK100	001 120 0222 1
C38	RCUV1H103ZF	001 103 8690 2
C39	RCUV1H390KC	001 103 9249 1
C40	RCUV1H020CC	001 103 9222 2
C41	RCUV1H102MD	001 103 9230 2
C42	RCUV1H150KC	001 103 9235 7
C43	RCUV1H390KC	001 103 9249 1
C44	RCUV1H150KC	001 103 9235 7
C45	ECEA0GK470	001 120 2624 9
C46	RCUV1H472MD	001 103 8780 1
C47	RCUV1H020CC	001 103 9222 2
C48	RCUV1E103MD	001 103 9214 2
C49	ECEA1CK100	001 120 0222 1
C50	RCUV1H102MD	001 103 9230 2
C51, C52	RCUV1H103ZF	001 103 8690 2
C53	RCUV1H120KC	001 103 9233 9
C54	RCUV1H390KC	001 103 9249 1
C55	RCUV1H103ZF	001 103 8690 2
C56	ECQV1H824JZ	001 106 3226 7
C57	RCUV1H102MD	001 103 9230 2
C58	RCUV1E223MD	001 103 9216 0
C59	RCUV1E103MD	001 103 9214 2
C60	RCUV1H101K	001 103 9229 5
C61, C62	RCUV1H102MD	001 103 9230 2
C63	RCUV1H070DC	001 103 8930 5
C65	RCUV1H222MD	001 103 9243 7
C66	RCUV1E103MD	001 103 9214 2
C67	RCUV1H050DC	001 103 9225 9
C68	RCUV1H030CC	001 103 9223 1
C69	RCUV1H220KC	001 103 8693 9
C70, C71	RCUV1E103MD	001 103 9214 2
C72	RCUV1H150KC	001 103 9235 7
C73	ECEA0GK101	001 120 2620 3
C74	RCUV1H102MD	001 103 9230 2
C75	RCUV1E103MD	001 103 9214 2
C76	ECEA1CK100	001 120 0222 1
C77	RCUV1H103ZF	001 103 8690 2
C78	RCUV1H220KC	001 103 8693 9
C79	RCUV1H103ZF	001 103 8690 2
C80	RCUV1H030CC	001 103 9223 1
C81	RCUV1H472MD	001 103 8780 1
C82	ECEA0JK220	001 120 0139 5
C83	RCUV1H103ZF	001 103 8690 2
C84	ECEA0JK220	001 120 0139 5
C85	RCUV1H472MD	001 103 8780 1
C86	RCUV1E104ZF	001 103 7066 4
C87	RCUV1E103MD	001 103 9214 2
C88	RCUV1E153MD	001 103 9215 1
C89	ECEA1HKR47	001 120 0338 0
C90	ECEA1HK0R1	001 120 0340 6
C91	ECEA1HK010	001 120 0341 5
C92	RCUV1H102MD	001 103 9230 2
C93	ECUV1E104MD	001 103 6960 7
C94	RCUV1E333MD	001 103 9218 8
C95	RCUV1H103ZF	001 103 8690 2
C96	RCUV1E103MD	001 103 9214 2
C97, C98	RCUV1H103ZF	001 103 8690 2
C99	RCUV1H103ZF	001 103 8690 2
C100	RCUV1E223MD	001 103 9216 0
C101	ECEA1HK010	001 120 0341 5
C102	RCUV1E223MD	001 103 9216 0
C103	ECEA0JK101	001 120 0136 8
C104	RCUV1H222MD	001 103 9243 7
C105	ECEA0JU470	001 120 3125 9
C106	RCUV1H101K	001 103 9229 5
C107	ECEA0JU471	001 120 2924 0
C108	ECEA0JU470	001 120 3125 9
C109	ECUV1E104MD	001 103 6960 7
C110	RCUV1E103MD	001 103 9214 2
C111	ECEA0JU101	001 120 2829 8
C112	ECEA1AU471	001 120 3029 8
C113	ECEA1CU100	001 120 2905 3
C114	ECEA0JU221	001 120 2925 9
C115	RCUV1E103MD	001 103 9214 2
C116, C117	RCUV1H103ZF	001 103 8690 2
C118	ECUV1E104MD	001 103 6960 7
C119	ECEA1CK100	001 120 0222 1
C120	ECEA1EK3R3	001 120 0292 7
C121	RCUV1E223ZF	001 103 9217 9
C122	RCUV1H220KC	001 103 8693 9
C123	RCUV1H270KC	001 103 9245 5
C124	RCUV1E223ZF	001 103 9217 9
C125	ECEA1AK220	001 120 0176 0
C126	RCUV1E333MD	001 103 9218 8
C127	ECQM1H473JZ	001 106 0810 9
C128, C129	RCUV1H221K	001 103 9242 8
C130	RCUV1H221K	001 103 9242 8
C133	RCUV1E223ZF	001 103 9217 9
C134	RCUV1E103MD	001 103 9214 2
C200, C201	RCUV1E223ZF	001 103 9217 9
C202	RCUV1H270JC	001 103 9571 4
C203	RCUV1E223ZF	001 103 9217 9
C204	RCUV1H102MD	001 103 9230 2
C205	RCUV1E223ZF	001 103 9217 9
C206	ECST1CY474LL	001 123 1246 4
C207	RCUV1H103ZF	001 103 8690 2
C208	ECST0JY225LL	001 123 1245 5
C209	RCUV1E223ZF	001 103 9217 9
C210, C211	RCUV1H103ZF	001 103 8690 2
C212, C213	RCUV1H102MD	001 103 9230 2
C214	RCUV1H103ZF	001 103 8690 2
C215	ECST0JY225LL	001 123 1245 5
C216	RCUV1E223ZF	001 103 9217 9
C217	RCUV1H103ZF	001 103 8690 2
C218	ECUV1E104MD	001 103 6960 7
C219	ECEA0GKK220	001 120 3848 1

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870600800 FHS/TM